From: PETERSON Jenn L
To: Eric Blischke/R10/USEPA/US@EPA
Cc: ANDERSON Jim M
Subject: RE: Issues for Development of PRGs in Round 2 Comprehensive Report
Date: 05/31/2006 09:27 PM

Eric,

From the ERA PRG development perspective I think they following things need to be resolved before another interation of the risk assessment, and the development of PRGs:

1. Methodology for the Calculation of Exposure Point Concentrations:

* Risk to Fish Using Tissue Residue Values: How will tissue residue values be used to determine exposure point concentrations for comparison to TRVs in the risk assessment for the different fish species? I don't think we agree right now on how to do this - see comments on the PRE and Comp TMs. They want to average over composites - I don't think this is appropriate for assessing risk to fish themselves. We need to estimate the range of individual conc. from composites...

* Risk to Wildlife Consuming Fish: How will fish tissue concentrations be used to calculate exposure point concentrations for these receptors?

* Risk to Fish Using Dietary Approach: How will sediment concentrations be combined to calculate exposure point concentrations for comparison to dietary TRVs? Over what area - examples per species.

  Ø Assumed dietary composition of fish species. This has been contentious in the past - we think they should do a sensitivity analysis, and a method similar to what is proposed for the food web model - e.g. have a "menu" of items fish would likely be feeding on and explicitly show the range. What the fish are feeding on is a sensitive parameter, and without a proper sensitivity analysis we wouldn't know at what point on the "range of dietary composition risk" we are representing by the proposed LWG compositions. We proposed reducing this uncertainty by obtaining fish stomach contents for direct comparisons. Until this happens they should do a probabilistic assessment to exemplify the dietary risk to fish.

* Shorebird and Diving Waterfowl: How will exposure point concentrations be calculated for the spotted sandpiper and the hooded merganser? How will the clam and bioaccumulation lumbriculus data be used in these calculations?

A table or document similar to the "Interim Deliverable for Human Health Risk Assessment: Round 1 Tissue Exposure Point Concentrations" could be developed to exemplify the methodologies proposed for the ecological risk assessment. Example calculations for each receptor could be done, in order to effectively resolve spatial scale and other exposure point concentrations.

2. Summation Rules for the Ecological Risk Assessment: This issue needs to be resolved along with the exposure point concentration methodology.

3. Spatial Scale for Surface Water PRG Development

4. Transition Zone Water Risk Framework

5. TRVs:
* Dietary TRVs - revised methodology that only concentrates on dose, not concentration
* Tissue Residue Values for Aquatic Organisms
* Wildlife TRVs - Review

6. Spatial Scale of the Food Web Model (and subsequent calculations of PRGs): They want to average over the whole site - we see value in running it over smaller spatial scales. PRGs calculated by averaging over the whole site to calculate site wide PRGs may not be protective of localized areas.

7. Methodologies for Calculating PRGs - related to (6), but also relevant to metals (they want to use BSAFs??) and PAHs (it sounds like they just want to use the dietary approach - we are interested in other lines of evidence).

-Jennifer

-----Original Message-----
From: Blischke.Eric@epamail.epa.gov [mailto:Blischke.Eric@epamail.epa.gov]
Sent: Thursday, May 25, 2006 2:48 PM
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Subject: Issues for Development of PRGs in Round 2 Comprehensive Report

During Tuesday's meeting with the LWG, Keith Pine identified five critical items that need to be resolved in order to develop PRGs in the Round 2 Comprehensive Report. The items are:

ERA LOE/WOE Matrix
Specific Changes to the BSAF approach
Changes to the Food Web Model (e.g., chemicals to be modeled, spatial scale, food web compartments)
Benthic toxicity thresholds (e.g., logistic regression, floating percentile, SQGs)

Water screening levels (TZW and SW for both ecological and human health risk)

During yesterday's TCT it was accurately pointed out that the government team did not provide our own list of elements critical to the development of PRGs. Chip and I recognize that some of these items are still being worked out (e.g., ERA LOE/WOE matrix and Benthic toxicity thresholds). However, we would like to provide as much direction to the LWG as possible regarding the development of PRGs for the Round 2 Report. We are prepared to be directive on the use of TRVs, the incorporation of EPA and partner comments on the food web model and PRE, the inclusion of a bivalve consumption exposure scenario as part of the HHRA, the application of various water quality criteria for the purpose of evaluating potential risks to human health or the environment resulting from exposure to surface water or transition zone water and any other items for which we are prepared to direct. For those areas where we still have work to do (e.g., ERA LOE/WOE matrix and Benthic toxicity thresholds) and are not in a position to be directive, we should think creatively about how we can fold some of these items in recognizing that the development of PRGs is still fundamentally a screening step.

In order to move forward with the Round 2 Report, I am requesting the following information from any of the technical representatives:

1) Issues that need to be resolved for the purpose of developing initial PRGs (i.e., risk screening) in the Round 2 Comprehensive Report recognizing that the initial PRGs will represent a mix of site specific and literature based approaches.
2) For the issues identified above, identify whether we are in a position be directive and what that direction might be.
3) For the issues identified above where we cannot be directive, what steps should be taken prior to development of the Round 2 Comprehensive Report.

Please provide me your list of issues NLT COB Wednesday, May 31st. In the meantime, Chip and I are going to be developing a PRG table that takes into account the various exposure pathways, receptors, lines of evidence etc. and include this in our comments on the PRG TM for the purpose of providing the LWG direction on the development of initial PRGs in the Round 2 Comprehensive Report. We plan on briefing the LWG on this approach during our meeting on June 6th and resolving direction at the meeting on June 12th.

If you have any questions about this request, please let me know.

Thanks, Eric